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ABSTRACT

The Iowa State Board of Education mandated the teaching of global education across the curriculum, effective July 1, 1989. This guide is intended to point the way for school districts developing their own models of global education defined as an approach to learning that promotes greater understanding of the world as an interconnected aggregate of human and natural systems. These systems operate within a single planetary life-support system on which the destiny of all humankind depends. The purpose of global education is to promote long-term human survival by developing greater respect for and cooperation between fellow human beings and greater concern for the environment on which all people depend for their very existence. A rationale for global education is offered, and suggests that content be structured around five basic themes: (1) global interdependence; (2) human resources, values, and culture; (3) the global environment and natural resources; (4) global peace and conflict management; and (5) change and alternative futures. Broad goals derived from these five basic themes are presented. Checklists for identifying elements of these themes that a school system may already include in its curriculum are provided. Examples of how global perspectives can be infused at every grade level and in every subject area are given. The concluding chapter lists 63 printed resources for global education and 16 organizations and resource centers. (JB)

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A Guide for Integrating Global Education Across the Curriculum

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Iowa Department of Education

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May 1989

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Preface

This guide has been developed to assist schools in meeting the new educational standard for global education, which becomes effective July 1, 1989. This new standard, adopted by the State Board of Education, calls for the teaching of global education across the curriculum.

Global education is an idea whose time is now, and this guide is the culmination of efforts over a number of years to bring a global education perspective to all Iowa schools in a systematic manner.

In these guidelines the comittee members have pooled their perspectives with those being expressed by educators in many other parts of the United States. Global education is a nationwide movement to recognize and teach about the realities of the global society in our classrooms. Iowa now joins a group of leading states around the country in setting standards for global education across the curriculum.

This guide is intended to point the way for school districts in Iowa to develop their own models of global education.

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Introduction
The Global Education Standard

These guidelines are designed to give Iowa educators a comprehensive view of the global education standard and how it can be integrated into the curricula of Iowa schools. The complete text of the standard is as follows:

12.5(11) GLOBAL EDUCATION. *The board shall adopt a plan which incorporates global perspectives into all areas and levels of the educational program so that students have the opportunity to acquire a realistic perspective on world issues, problems, and prospects for an awareness of the relationship between an individual's self-interest and the concerns of people elsewhere in the world. The plan shall include procedures for a review of its effectiveness.*

The mission of global education is to produce citizens who are both knowledgeable about the world, and who possess skills, values, and a commitment appropriate for the support of quality, long-term survival of all human beings.

This publication is designed to help administrators and teachers understand the dimensions of global education, so that their districts can proceed toward compliance with the standard from a firm foundation of both theory and practice.

We recommend that districts proceed with the implementation along two broad paths. First, a plan should be developed and adopted by the local board of education, with a timetable for implementation across the curriculum, according to the district's normal cycle for curriculum revision. Thus, the complete infusion of global perspectives into the total curriculum may occur over as long a period as it takes for the revision of each curricular area.

Second, since curriculum revision is an ongoing process, we also recommend that districts undertake the infusion of global perspectives into each subject area and grade level as soon as conditions and constraints permit. It is important that districts gain the experience of developing and teaching global perspectives well in advance of the formal curriculum review and revision process, in order to afford themselves the broadest opportunities possible for gaining experiences with this infusion mandate. We have provided a rationale, goals, suggested topics, and resources in this

Developing global perspectives among our youth is a responsibility that all educators share.

guide. And, while we suggest their use as a framework, we do not expect (nor do we want) school districts to follow them mechanically or submissively. Global education encompasses a range of perspectives on different topics and issues, toward which there are many different viable approaches, and we would hope that this guide will facilitate a development process within each disctrict to create its own perspectives and responses to the models we provide.

Developing global perspectives among our youth is a responsibility that all educators share. It is not the exclusive domain of the social studies department, nor of the science department, nor of the foreign language department. All subject matter specialists—from teachers of mathematics to teachers of industrial arts, from teachers of art and music to teachers of home economics, elementary teachers in self-contained classrooms, library media specialists, and even guidance counselors—share the obligation. This obligation extends beyond the formal curriculum, to our thoughts, words, and actions, because a global perspective is a fundamental outlook on the world. In order to teach global perspectives, educators ought to model global perspectives for their students.

People have different global perspectives, based on their own understandings, values, and outlooks. The only common fundamental imperative is that we, as educators, help our young people develop a broad outlook that views the world as a single interdependent system, comprised of many interacting parts, within which there are both serious problems and opportunities. It is critical that teachers help students develop, over the entire range of their elementary and secondary programs, a deep understanding of and appreciation for the concepts, attitudes, and abilities which are necessary to be knowledgeable, skillful, and involved participants in a global society.

I
Global Education: Definition and Rationale

A Definition of Global Education

Elements of global education have been dealt with in different ways over time. These elements have included the process of learning about other countries in the world—through the study of their historical traditions, physical features, economic and political structures, religions, and cultures. There have also been approaches which involved the study of international relations or the study of separate global issues, such as war, pollution, and population growth. These are certainly components of global education, but they relate primarily to topics that are generally assigned to the social studies curriculum. In addition, they do not consider the holistic approach to an understanding of the world that we propose here.

Global education represents an extension of good citizenship to the global dimension.

This guide offers a comprehensive definition of the nature and purpose of global education: *Global education is an approach to learning which promotes greater understanding of the world as an interconnected aggregate of human and natural systems. These systems operate within a single planetary life-support system on which the destiny of all humankind depends. The purpose of global education is to promote long-term human survival by developing greater respect for and cooperation with our fellow human beings and greater concern for the environment on which all people depend for their very existence.*

The underlying assumption of global education is that it represents an extension of the concept of one of the fundamental purposes of education in our society: developing responsible citizens. A good citizen is variously defined as one who is a useful member of society, one who contributes to its social and economic well-being by being industrious and productive, one who obeys its laws, one who is a good

neighbor, one who accepts the responsibilities of being socially aware and active. That is a very broad range of responsibilities that different people will fulfill in different ways and to different degrees.

To these goals of being a good citizen (which have applied to the local community, the state, and the nation), we add the dimension of global citizenship. Global citizenship augments and enlarges traditional meanings and visions of citizenship. Global citizenship involves the recognition that, not only are we members and citizens of a particular society, the United States; we are also members of the larger global society of humanity, and as such, have responsibilities as citizens which extend to the entire human family.

Global citizenship involves the recognition that, not only are we members and citizens of a particular society, the United States; we are also members of the larger global society of humanity.

Building a Rationale

Why do all people need to be concerned about being responsible citizens of the world? Does this goal conflict with being loyal citizens of the United States? To begin with, let's consider the nature of the global environment in which we live.

The earth is a life-support system which operates in a self-sustaining state of equilibrium. The thin layers of protective atmosphere, fertile soil, and water constitute the biosphere. This biosphere, which supports all life on earth, is a "closed system" which, like a living organism, sustains itself through natural feedback mechanisms. The natural shifts of the earth, over eons of time, have produced ice ages, floods, dramatic climate changes, and shifting land masses, but all have been consistent with the evolution of a "living planet" and harmonious with the overall balance of nature. The ability to upset the balance of this system has increased with human technological advances, which are global in their scope.

There is no escaping the fact that the entire planet is affected by events such as massive deforestation; oil spills; automobile emissions; the international movement of

people, information, raw materials and goods; and the specter of nuclear war. It is the global dimension of these human activities that clearly represents global interconnectedness and interdependence. The destinies of people in every country of the world are undeniably linked. Neither the toxic fallout from a nuclear power plant meltdown nor the suffocating ooze from a massive oil spill will respect geographic or political boundaries.

In considering the characteristics of the so-called global village, transportation and communication technologies have so shrunk the world that people and goods can circle the globe in less than a day, and messages can be beamed around our planet in less than a second. Multinational corporations conduct manufacturing and distribution operations around the world, traversing regions, cultures and national boundaries. We live in a global society, unified by interrelated economic activity, threatened by interrelated environmental activity, and fragmented by political unrest.

Global education is an approach to learning that recognizes these realities and attempts to simplify their complexities so they can be understood. This is no easy task. The development of the understandings relevant to global education will require repeated exposure to key issues, ideas, and concepts. This is why all subject areas must be involved, and why global education must pervade the entire K-12 curriculum. Students need varied and continuing exposure to the wide variety of content, ideas, themes, concepts, and values represented by global education in order to develop the broadest possible understandings of this perspective.

The development of the understandings relevant to global education will require repeated exposure to key issues, ideas, and concepts.

To help students develop a global perspective, they must be introduced to and become better acquainted with different cultures and their interrelationships. They must be aided in developing a sense of appreciation for the diversity and similarities within the human family. This will involve learning about different aspects of all cultures: their literature, their art, their music, their historical traditions, their languages, their religions, their family life, their social structures, and their other contributions to civilization. The

The goals of global citizenship are clearly not in conflict with the goals of national citizenship any more than is family loyalty in conflict with loyalty to one's country.

study of these aspects of other cultures and their interdependencies can and must be integrated into every subject area and grade level in the curriculum.

Only by helping students develop understandings and appreciations of other cultures can teachers assist them in developing a sense of common membership in the human family. Global education involves helping students develop a sense of commitment to the wider world.

If educators are to better prepare students for an increasingly global society in the future, they must give them the conceptual and analytical tools to deal with that future. The goals of global citizenship are clearly not in conflict with the goals of national citizenship any more than is family loyalty in conflict with loyalty to one's country . Clearly, this involves multiple loyalties, not exclusive ones. All educators need to help students recognize that fact through an understanding of the global ties which bind us together.

As illustrated in Figure 1, global education attempts to enlarge perspectives from those clustered around the "here and now" to those which extend concerns in time and space.

Figure 1

II
A Thematic Model for Developing Global Perspectives

The mission of global education is to produce citizens who are both knowledgeable about the world and who possess skills, values, and a commitment appropriate for the support of quality, long-term survival of all human beings. To support the pursuit of this mission, global education will be structured in this document around five basic themes:

Global interdependence
Human resources, values, and culture
The global environment and natural resources
Global peace and conflict management
Change and alternative futures

Global interdependence means mutual dependence—parts of a whole depending on each other. Terms like *spaceship earth* and the *global village* acknowledge the fact that humankind is being more tightly bound and connected together everywhere, especially over the past half century.

To help students work to promote a safer and more just world society by understanding the pervasive nature of global interdependence, educational programs must engage them in the study of the global economic, political, cultural, ecological, and technological systems in which they live. Acquisition of the knowledge of these systems of interdependence can enable students to participate more effectively and responsibly in their world.

There is no practical limit to human cooperation, creativity, and intelligence. The creation of a better world is not an impossible dream.

Human resources, values, and culture includes the languages, literature, art, music, traditions, myths, social structures, family life, and religions of the diverse national and cultural groups within the global community. It also includes the human values of individual worth, human dignity, moral and collective responsibility, integrity, justice, and equality. The study of the human community through these elements can help to give people a sense of the highest levels of achievement of which humanity has been thus far capable.

Human resources have their basis in the evolution of humans as social and purposeful creatures whose elevated intelligence has led to both sublime creation and terrible destruction. There is no practical limit to human cooperation, creativity, and intelligence, and the creation of a better world is not an impossible dream. Yet, human failings have left a world in critical need of positive action.

The global environment and natural resources include the ecological system through which life is sustained and enhanced. The global environment encompasses the assets which sustain existence on this planet. This environment includes the life-giving atmosphere, water and soil, without which life as we know it could not exist. It includes the earth's forests, minerals and fossil fuels, without which our modern technological civilization would not have evolved. The delicate balance of this environment is an amazing thing to behold.

This environment has clearly been exploited, and is possibly nearing the limits of its ability to fully cleanse and renew itself in response to the destructive powers of human driven technologies. We must develop a greater awareness of the responsibilities we have, and actions we must take to safeguard this living environment and prevent its further deterioration

Global peace and conflict management. With the prospect of widespread destruction and death made possible by the instruments of war, survival depends upon concentrating our efforts on the means to resolve conflicts peacefully. This will be no easy task in dealing with countries where illiteracy and stongly held beliefs combine with poverty, starvation, and disease to create conditions of perpetual instability. Neither will it be easy in negotiating with more advanced nations, where the preparation for war is often taken for granted as a necessary activity. Yet, developing the means through which conflicts may be resolved peacefully is crucial. The goal of human survival depends upon it. This central component of global education involves the development of strategies to teach conflict resolution as a process that has broad implications—from resolving local disputes to de-fusing confrontations among the superpowers.

Conflict management will be no easy task in dealing with countries where illiteracy and strongly held beliefs combine with poverty, starvation, and disease to create conditions of perpetual instability.

Change and alternative futures is a theme which provides global education with a forward-looking focus. Rapid change is a well-documented phenomenon of our time. Developing an understanding of elements of global change and those of stability can add depth to our perspectives. Also, our major concern in developing global perspectives is not with the past, it is with the future.

This does not attempt to minimize the importance of the study of history. The study of the past is crucial for gaining a time perspective and for understanding how we got to where we are today, but the future is where we will either reap the benefits of our pursuit of enlightened global policies or suffer the consequences of our mistakes. The study of alternative futures is a pro-active exercise which involves setting goals for a better tomorrow, rather than allowing aimlessness and crisis management to chart the direction and shape of events.

III
Goals for Global Education

In this section we present broad goals derived from the five basic themes. We leave the development of specific instructional objectives as the prerogatives of local committees. We also include sample activity ideas to suggest how the goals may be expressed in practical ways. Following the activity idea is one possible subject area in which the activity may be appropriate. The goals will be appropriate for many subject areas, although only one example will be given in each case.

Theme I: Global Interdependence

Goal I: To help students recognize the delicate balance that exists between the life support system of the planet and the human activities which occur within it.

Activity idea: Develop a lesson about the automobile and the effects of auto emissions on the environment (driver education).

Goal II: To help students recognize the interconnections and consequences of global events to the quality of their own lives.

Activity idea: Trace the sale of corn from the local to the international market (agriculture, economics).

Goal III: To help students develop a better understanding of themselves as individuals, and as members of the human race.

Activity idea: Trace the historical origins and migration patterns of different racial and ethnic groups.

Theme II: Human Resources, Values, and Culture

Goal I: To help students appreciate the need for the expansion of human rights to all individuals.

Activity idea: Teach a lesson showing how drama can be used for political or cultural suppression (drama).

Goal II: To help students understand that we are enriched rather than diminished by respecting those who have different customs, languages, and belief systems.

Activity idea: Study the origins of our number system (math).

Goal III: To help students understand the relationships between ethnic, religious, and nationalistic loyalties and the development of a global perspective.

Activity idea: Show examples of art being used to glorify religion, an ideology, or a person (art).

Theme III Global Environment and Natural Resources

Goal I: To help students understand the interconnectedness of the human community, the global environment, and our finite natural resources.

Activity idea: Examine styles of buildings in different climates (industrial arts, art).

Goal II: To assist students in identifying life-long methods to preserve our natural resources.

Activity idea: Examine different lifestyles as they relate to modern conveniences and cultural beliefs (home economics).

Goal III: To help students explain our changing attitudes toward the global environment.

Activity idea: Compare values of urban and rural cultures as expressed in their literature (language arts).

Theme IV: Global Peace and Conflict Management

Goal I: To help students develop, apply, and evaluate alternative methods of conflict resolution.

Activity idea: Teach physical non-competitive games (physical education).

Goal II: To help students recognize the capacity of the arms race to affect national economics, social structures, and the environment.

Activity idea: Study the budget allocations for military expenditures for various countries (economics).

Goal III: To help students realize that efforts to bring about global cooperation on common issues must be preceded by understanding the constraints and conflicts engendered by national loyalties.

Activity idea: Examine topics of emphasis from magazines around the world (journalism).

Theme V: Change and Alternative Futures

Goal I: To help students realize that human activities often have unintended long-term consequences, as well as intended short-term ones.

Activity idea: Study the long-term effects of the uses of fertilizers, insecticides, and herbicides (agricultural science, biology, chemistry).

Goal II: To help students realize that human choice largely determines the future.

Activity idea: Study the implications of genetic engineering (biology).

Goal III: To help students develop an appreciaton for the skills and attitudes that will enable them to continue learning and living on the earth.

Activity idea: Examine the uses of technology in managing information.

IV
Identifying Global Perspectives in Your Present Program

Many schools are already teaching aspects of global education.

The following five pages contain checklists to use in identifying elements of the five suggested themes a district may have in its curriculum. We believe that there are many schools across the state which are already teaching about many of the topics and issues we are suggesting. The assessment process provides the opportunity to identify those grade levels and subject areas where global education concepts are currently being addressed.

Once this assessment is completed and the results compiled, the process might proceed to developing brief statements about each item checked, and an explanation of how it presently relates to the philosophy and goals expressed in this guide (or alternative ones developed at the local district level). For areas in which little or nothing is apparently being done, it may be necessary to re-examine that subject area or grade level. For those subjects or grade levels found lacking in global perspectives content or processes, the district's efforts can then focus more sharply on those areas.

Please note that the checklists contain only the academic subject areas and not other programs such as gifted and talented or special education. Teachers in those programs should attempt to identify the subject areas with which they deal and complete the process accordingly. for local districts which have developed additional or alternative themes, substitutions may be made where appropriate.

Global Education
Assessment Process

Global Interdependence	K - 3	4 - 6	7 - 8	9 - 12
Agricultural Science				
Art				
Business Education				
Drama				
Driver and Safety Education				
Foreign Languages				
Home Economics				
Industrial Technology				
Journalism				
Language Arts				
Mathematics				
Music				
Physical Education				
Science				
Social Studies				
Speech, Debate				

Global Education
Assessment Process

Human Resources, Values, and Culture				
Agricultural Science				
Art				
Business Education				
Drama				
Driver and Safety Education				
Foreign Languages				
Home Economics				
Industrial Technology				
Journalism				
Language Arts				
Mathematics				
Music				
Physical Education				
Science				
Social Studies				
Speech and Debate				

Global Education
Assessment Process

The Global Environment and Natural Resources	K - 3	4 - 6	7 - 8	9 - 12
Agricultural Science				
Art				
Business Education				
Drama				
Driver and Safety Education				
Foreign Languages				
Home Economics				
Industrial Technology				
Journalism				
Language Arts				
Mathematics				
Music				
Physical Education				
Science				
Social Studies				
Speech, Debate				

Global Education
Assessment Process

Global Peace and Conflict Management	K - 3	4 - 6	7 - 8	9 - 12
Agricultural Science				
Art				
Business Education				
Drama				
Driver and Safety Education				
Foreign Languages				
Home Economics				
Industrial Technology				
Journalism				
Language Arts				
Mathematics				
Music				
Physical Education				
Science				
Social Studies				
Speech, Debate				

Global Education
Assessment Process

Change and Alternative Futures	K - 3	4 - 6	7 - 8	9 - 12
Agricultural Science				
Art				
Business Education				
Drama				
Driver and Safety Education				
Foreign Languages				
Home Economics				
Industrial Technology				
Journalism				
Language Arts				
Mathematics				
Music				
Physical Education				
Science				
Social Studies				
Speech, Debate				

V
Infusing Global Perspectives Into The Curriculum

After reflecting upon the rationale, themes, and goals and identifying global perspectives already present in a curriculum, the next step is to consider additional perspectives, topics, issues, or perhaps even alternative themes that express an approach to global education.

Global education is not just 'one more thing' to add to an already overburdened curriculum.

Global education is not just "one more thing" to add to an already overburdened curriculum. Global education is an attitude toward the world about which we seek to develop better understandings and concern.

The list which follows provides one collection of examples of how global perspectives can be infused at every grade level and in every subject area. We suggest four basic approaches through which infusion can be facilitated. They include **direct content, indirect content, applied content, and teacher modeling**.

Direct Content - The first approach to infusion is to identify appropriate global topics around which to build separate units or lesson plans within the existing curriculum. For topics not originally considered as having global dimensions, planned or spontaneous identification of such dimensions can be pursued. Here, the content itself is related to one of the global education themes, or is augmented to have a global dimension. Most of the suggested activities on the following pages are in this category.

Indirect Content - This approach involves identifying other ways in which global perspectives can be added to already existing units and lessons, whether or not they deal with a globally related topic. Primarily, this involves using examples of a global nature. Examples: When studying percentages in math, a possible problem could be: "If 2% of the ozone layer is presently depleted, and it deteriorates at .05% in a year, what will be the percentage loss by 1999?"

When creating story problems in math, use names from other cultures: "Mai Li had ten rice bowls; she sold three; how many did she have left?" When giving a writing assignment in language arts, have students write about their experiences visiting another culture, meeting people from another culture, doing something to help the environment.

Applied Content - A third approach to infusion involves applying the basic goals and processes of global education in the classroom itself, outside the context of global education content. For example, using conflict resolution strategies to settle classroom disputes, using negotiation and consensus to decide issues, appreciating the differences among the cultures represented in the class, keeping the classroom environment free from pollution (e.g., placing waste paper in the trash container).

Modeling - The fourth way in which to apply infusion involves teacher modeling of appropriate values, attitudes, and behaviors. This can involve recognizing the worth and dignity of everyone and treating them with respect, acting in responsible ways toward the environment and acting in other ways as a responsible global citizen.

Examples of Direct Content

As global perspectives come to pervade instruction, additional ideas will be developed. But for the present, we offer these examples of content which can be used as topics within the present curricular framework, and as possible themes or unit topics when there has been sufficient time for more comprehensive curriculum planning. How these topics are actually used is up to the individual teacher. There are many different possibilities and specific expressions of each one.

There are dozens of topics in addition to the ones we have listed here. This list is not intended to be comprehensive, merely suggestive in terms of the possibilities. These can be looked upon as **idea generators**.

Developing Global Perspectives in the Elementary Grades

Since the elementary grades come first in the sequence of development, we first offer some examples to develop global awareness in grades K - 6. This is only a sampling; districts should develop their own approaches, bearing in mind that, while it is not necessary to "globalize" every subject taught in self-contained classrooms, the variety of infusion models offered in this guide should make it feasible to give most of them a global perspective in some way.

Grades K-3 - Your Senses and the World Around You

Sensory awareness and the immediate environment
Seeing similarities and differences among people and things
Stories from other cultures
Living and non-living things
The role of living things in the environment
Habitats and environments
Life cycles in the environment
Relationships between the natural and man-made worlds
Systems approach to a global environment
Understanding parts of a thing and the whole thing
Human needs
Becoming aware of maps and globes
Conflict resolution, getting along with others

Grades 4-6 - Planet Earth and the Universe

Understanding the solar system and the location of earth
Understanding basic cosmic forces that affect life on earth (air, water, etc.)
Humankind: similarities and differences
Understanding the development of agriculture and technology, disruption of the earth's systems, and the basic causes of pollution
Windows on the world: student perceptions
Focus on value systems: individual, group, societal, cultural, and planetary
Focus on conflict resolution

Secondary Level Subject Areas

Agricultural Science, Technology, and Marketing -

The global farm commodities economy
International marketing
Farming methods in other cultures
Conservation and tillage in different cultures
The long-term local and global effects of the uses of fertilizers, insecticides , and herbicides
Energy-intensive farming in the U.S. vs. natural, low-tech farming in other cultures
Disappearing and depleted soil
The effects of possible global climate changes on agriculture
The Green Revolution and the world's food supply
Food and politics
The industrialization of food production and its effects on the safety and quality of what we eat

Art - The field of art involves both appreciation and creation. Students can be given examples of art representing creativity in other cultures and historical periods, and can be given assignments to create works of art imitating those done in various cultures and periods.

The process of creative problem-solving and its universality
Murals and other artistic forms of visual storytelling, with global themes
Fashion and costume (and jewelry) design, emulating those arts in other cultures
Photography, cinematography and television around the world
Art and career education; comparison of careers in various cultures
Creating pictures or models of the world: people, objects, symbols from different countries, any scenes from other cultures, drawing maps of the world
Artists and art in different parts of the world

Advertising art from different countries
Art and artists from different historical periods
Art to glorify a religion, political leader or ideology
Folk art from different cultures, primitive art, iconic art
The history of art around the world
Symbols around the world (icons, logos, flags, heraldry, insignia)
Architecture and culture
Earth art, environmental art

Business (personal economics, typing, office practice, computer use) -

Currency and coins from other cultures, the currency exchange system
Products from around the world
Occupations and income around the world
Personal economics in other cultures
World trends and occupational outlooks

Drama - The dramatic arts have their origins far back historically and culturally. Our traditions have deep roots which can be explored in many different ways.

Acting out folk tales or stories from other cultures
Contributions of various cultures to the theatre: Western and non-Western
Drama as political or cultural ideology
The theater vs. television around the world
Motion pictures as representations of cultural identity
Television as a reflection of values
Censorship and freedom of expression in the theatre

Driver and Safety Education - Transportation has changed dramatically in the past 200 years and has changed the face of the earth. The concept of transportation, of our needs from getting more and more rapidly from one place to another, and of the implications of this phenomenon can be explored.

Forms of transportation for different people in different cultures

How to get there: walking, biking, sailing, riding in a car
Transportation around the world
The automobile and energy consumption
Mass transit as an energy-saving alternative to the automobile
Rules of the road around the world
International road signs
Fuel costs in different countries
Car culture and the environment

Foreign Languages - The spoken language is our principal means of communicating with people from other cultures. But there are many forms of intercultural communication which modify the spoken and written word. These can be explored in many different ways, both within and outside actual foreign language classes.

The language of gesture, body language and etiquette in different cultures
Language families and their origins
The limitations of language in cross-cultural communication
Changes in languages and cross-cultural borrowing
Foreign words in the English vocabulary
Dialects in different sub-cultures
The nature and problems of bi-lingual and multi-lingual societies

Home Economics - The major sociological unit emphasized in the home economics curriculum is the family. The family has universality even though its structure my differ in various societies. In home economics emphasis is placed on gaining an understanding of various lifestyles and resource management practices related to meeting basic human needs. Examples of topics which may be explored related to global education include the following.

Family structures throughout the world
Roles and functions of family members in various cultures
Satisfaction of basic human needs for food, clothing, and shelter in different environmental settings.

Development and management of human and material resources
Family dwellings throughout the world
Environmental, sociological, and cultural influences on clothing choices
Resource availability and the effects on nutrition and health of the family
Appropriateness of household technologies to various settings
Child-rearing practices and socialization of children in various cultures
Satisfaction of nutritional needs through various food choices and food preparation methods

Industrial Technology Education -

Manufacturing in different cultures
Tools in different cultures
Construction technologies in various cultures
Energy as used in different cultures
Building styles in different climates
Furniture making in different cultures
Artisanship in our culture and in others

Journalism -

The origins and fundamental role of the newspaper
Magazines from around the world
The role of the media in a global society
Restrictions on freedom of the press in other cultures
The media as government watchdog
Political cartoons, political satire and government repression
Information as a form of empowerment, and the decentralization of information in the 'information age'
World communications technology

Language Arts -

Stories, poetry, and folk tales from other cultures
Foreign literature: the great writers from other periods and cultures, Western and non-Western

Studying aspects of different cultures through their literature
Studying global issues and values through literature (e.g., poetry, stories, essays, novels which deal with various global issues, human relations issues)
Literature of a historical period vs. literature about a period
Literature about a culture vs. literature from a culture
Literature as a form of nationalism
World education/literacy issues

Mathematics -

Explaining the origins of our numbering systems (Roman and Arabic)
Explaining the origins of the abacus, and actually using one for calculations
Problems involving the conversion of foreign currencies
Problems involving metric conversion
Discussing historical and cultural origins of our mathematical systems
Measurement in ancient times and in other cultures
Time keeping (calendars) in other cultures
Use of tables of statistics involving international issues (e.g., population)
Story problems involving situations in other cultures

Music (including appreciation and performance) -

Singing songs, performing dances from other cultures
Studying (and playing, if available) musical instruments from other cultures
Musical instruments in our culture which have origins (or are made) in other cultures
Music and dance from around the world
Foreign origins of musical terminology (e.g., Italian: allegro, adagio, fortissimo, etc.), and musical notation
Contributions of other cultures to American music
Contributions of American music to other cultures
Popular and classical music in other cultures
Sacred vs. secular music in different cultures
Environmental and "New Age" music from around the world

Physical Education -

Studying the origins of various sports
Sports around the world
History of the Olympics
The role of sports in a culture (from Roman gladiators to the National Football League)
Spectator sports vs. fitness for all
Physical education as taught in other cultures
International sports and politics
New (non competitive) games
Different cultural attitudes toward sports and exercise

Science -

Discovering nature and caring for living things
Ecology, including lifestyles, population, community eco systems
Historical and cultural contributions to scientific discovery
Models and scientific methods used by scientists in other cultures
The diffusion of scientific knowledge around the world
Non-Western roots of Western science
The spread of disease and worldwide epidemics
Efforts toward worldwide scientific cooperation
The Green Revolution and other scientific efforts to solve the world hunger problem
Genetics and natural selection, genetic engineering
Biotechnology and ethics
The chemistry of pollution, how the earth cleanses itself
The causes and cures for pollution
The chemistry of ozone, and the nature of the ozone layer
The greenhouse effect and its possible effect on the polar ice caps

Social Studies -

Contributions of other cultures to American customs, language, culture
Multinational corporations
Foreign debt and the global economy
Economic issues in developing countries

The growing gap between rich and poor of the world
The economics of resource depletion
Global weather and climate patterns
Human rights issues and policies
Ecology and the politics of scarcity
Ecological humanism and a planetary society
Good citizenship in the context of global interdependence
Historical global migration patterns

Speech and Debate
The uses of global or environmental topics for debate
The study of classical oratory
Speech and debate training in other cultures

VI
Resources for Global Education

Global education is a developing field and we must chart our way without thinking that the only way to teach about these topics and issues is to rely on textbooks and pre-packaged materials. A consideration of the five themes and examples of topics reveals that global education does not come out of a textbook; it comes from our abilities to make connections between topics we already deal with in the curriculum and their global implications and dimensions.

Developing effective strategies for promoting global perspectives will take time—and effort. We have provided a model and a beginning. What follows here are resources in three different categories that will be useful for: 1) gaining background for the general development of global perspectives, 2) becoming acquainted with the theoretical foundations of global education and the issues and controversies over this perspective, and 3) materials which provide classroom activities for developing global perspectives. Those marked with an asterisk (*) are considered to be fundamental documents in the field. Those marked with two asterisks (**) are highly recommended for general background.

Global Perspectives and Perspectives on the Last Decade of the Twentieth Century

Barnaby, Frank. *The Gaia Peace Atlas*. New York: Anchor/ Doubleday, 1988.**

Botkin, James, Dan Dimancescu, and Ray Stata. *Global Stakes: The Future of High Technology in America*. New York: Penguin Books, 1984.

Brown, Lester R. *State of the World, 1989: A Worldwatch Institute Report on Progress Toward a Sustainable Society*. New York: W.W. Norton, 1989.**

Harman, Willis. *Global Mind Change: The Promise of the Last Years of the Twentieth Century*. Indianapolis: Knowledge Systems, 1988.**

Kidron, Michael, and Ronald Segal. *The New State of the World Atlas*. New York: Simon and Schuster, 1987.

Myers, Norman, ed. *Gaia: An Atlas of Planet Management*. New York: Anchor/Doubleday, 1984.**

Naisbitt, John. *Megatrends*. New York: Warner Books, 1982.

Rand McNally. *World Facts in Brief*. New York: Rand McNally, 1988.

Roszak, Theodore. *Person/Planet*. New York: Anchor/Doubleday, 1978.

Russell, Peter. *The Global Brain: Speculations on the Evolutionary Leap to Planetary Consciousness*. Los Angeles: J.P. Tarcher, Inc., 1983

U. S. Central Intelligence Agency. *The World Factbook*, 1988. Washington, D.C.: U.S. Government Printing Office, 1989.

The World Commission on Environment and Development. *Our Common Future*. Oxford, England: Oxford University Press, 1987.**

Yankelovich, Daniel. *New Rules: Searching for Self-Fulfillment in a World Turned Upside Down*. New York: Bantam, 1982.**

Perspectives on Global Education

Books

Becker, James, ed. *Schooling for a Global Age*. New York: McGraw-Hill, 1979.*

Berendzen, Richard. *Touch the Future: An Agenda for Global Education in America*. Emmaus, PA: Rodale International, 1988.

Botkin, James, Mahdi Elmandjra, and Mircea Malitza. *No Limits to Learning: Bridging the Human Gap*. Elmsford, NY: Pergamon Press, 1979.

Freeman, Robert. ed. *Promising Practices in Global Education: A Handbook with Case Studies*. New York: National Council on Foreign Language and International Studies, 1986 (available from The American Forum).

Joy, Carroll, and Willard M. Kniep. *The International Development Crisis & American Education*. New York: Global Perspectives in Education, Inc., 1987.

Kniep, Willard, ed. *Next Steps in Global Education: A Handbook for Curriculum Development*. New York: Global Perspectives in Education, 1987.*

Rosengren, Frank, Marylee Crofts Wiley, and David S. Wiley. *Internationalizing Your School*. New York: National Council on Foreign Language and International Studies, 1983.

Study Commission on Global Education. *The United States Prepares for Its Future*. New York: Global Perspectives in Education, 1988.*

Monograph

Hanvey, Robert G. "An Attainable Global Perspective." New York: Center for War/Peace Studies, 1979* (available from The American Forum, see below).

Articles

Ad Hoc Committee on Global Education. "Global Education: In Bounds or Out?" *Social Education*, April/May 1987, pp. 242-249.

Anthony, Robert B. "Multinational Corporations and Global Awareness." *The Social Studies*, March/April, 1985, pp. 59-61.

Cleveland, Harlan. "The World We're Preparing Our Schoolchildren For." *Social Education*, October, 1986, pp. 416-423.

Cole, Donna J. "Multicultural Education and Global Education: A Possible Merger." *Theory into Practice*, Spring, 1984, pp. 151-154.

Cortés, Carlos E., and Dan B. Fleming, "Introduction: Global Education and Textbooks." *Social Education*, September 1986, pp. 340-344.

Goodlad, John I. "The Learner At the World's Center." *Social Education*, October 1986, pp. 424-435.

Kniep, Willard M. "Global Education in the Eighties." *Curriculum Review*, November/December, 1985, pp. 16-18.

_____. "Global Education: The Road Ahead." *Social Education*, October, 1986, pp. 415.

Kobus, Doni K. "The Developing Field of Global Education: A Review of the Literature." *Educational Research Quarterly*, Vol 8, no. 1, (1983) pp. 21-27.

Lamy, Stephen L. "Teacher Training in Global Perspectives Education: The Center for Teaching International Relations." *Theory Into Practice*, Vol. XXI, Number 3, (Summer, 1982) pp. 206-211.

Nava, Julian. "Teaching and Learning for the 21st Century." (Cultural Pluralism and Global Interdependence). *Social Education*, March, 1988, pp. 215-216.

O'Neil, John. "Global Education: Controversy Remains, But Support Growing." *ASCD Curriculum Update*, January, 1989, pp. 1-8.*

Rosenau, James N. "Teaching and Learning in a Transnational World," *Educational Research Quarterly*, Vol 8, No. 1 (1983), pp. 29-35.

Swetz, Frank. "Mathematics: A Window on the World." *Curriculum Review*, November/December, 1985, pp. 61-63.

Vocke, David E. "Those Varying Perspectives on Global Education." *The Social Studies*, January/February, 1988, pp. 18-20.*

Woyach, Robert B., and Janice Love. "Citizenship and World Affairs," *Educational Research Quarterly*, Vol. 8, No. 1 (1983), pp. 36-47.

Publications containing classroom applications, teaching strategies, and lesson plans.

(The following are available from The American Forum,
45 John Street, Suite 1200
New York, NY 10038)

.Anderson, Charlotte C. *Beyond Boundaries: Law in a Global Age*, 1983, (grades 7-12)

Aquina-Mackles, Alexis, David C. King, and Margaret S. Branson. *Myself and Others*, 1979 (grades K-5)

Barnet, Judith. Culture's Storehouse: Building Humanities through Folklore (*Intercom* 90/91, 1978) (grades 7-12)

Czarra, Fred, et. al. ***Short Stories from around the World*** (grades 5-9).

Torney-Purta, Judith. ***Evaluating Global Education: Sample Instruments for Assessing Programs.***

"Through the Legal Looking Glass: Reflections of Peoples and Cultures" (***Intercom*** 100, 1981) (grades 9-12).

"The Geographic Route to a Global Perspective" (***Intercom*** 101, 1982) (grades 7-12).

"Simulations for a Global Perspective" (***Intercom*** 107, 1985) (grades 7-12).

Teaching Global Awareness: An Approach for Grades 1-6.

(The following publications available through The Center for Teaching International Relations [CTIR]
University of Denver
Denver, CO 80208)

Many of these publications have classroom activities with master pages which can be duplicated for class use.

Benegar, John. ***Teaching Writing Skills: A Global Approach,*** 1986. (grades 6-12).

Bergstrom, Kirk. ***World Citizen Curriculum,*** 1987. (grades 9-12).

Collins, H. Thomas, and Fred Czarra. ***Global Primer: Skills for a Changing World,*** 1986 (grades K-8).

Hursh, Heidi, and Micharl Prevedel. ***Activities Using the State of the World Atlas,*** 1988 (grades 7-12).

Koranski, Bruce, ed. ***Teaching About the Consumer and the Global Marketplace,*** 1985 (grades 4-12).

Lamy, Steven, et. al. ***Teaching Global Awareness with Simulations and Games,*** 1986 (grades 7-12).

Massachusetts Global Education Project. *Global Issues in the Elementary Classroom*, 1988 (grades K-6).

Otero, George, and Gary Smith. *Teaching About Ethnic Heritage*, 1984 (grades K-12).

Sanborn, Michelle, et. al. *Teaching About World Cultures*, 1986 (grades 7-12).

Shiman, David. *Teaching About Human Rights*, 1988 (grades 7-12).

Social Studies Development Center. *In Search of Mutual Understanding: A Classroom Approach to Japan*, 1986 (grades 7-12).

Smith, Gary and George Otero. *Teaching About Cultural Awareness*, 1986 (grades 4-12).

Switzer, Kenneth, et. al. *Global Issues: Activities and Resources for the High School Teacher*, 1987 (grades 7-12).

Zola, John and Reny Sieck. *Teaching About Conflict, Nuclear War, and the Future*, 1984 (grades 6-12).

Additional Publications -

Global Education Catalog, Social Studies School Service, 10200 Jefferson Boulevard, Room Y6, P.O. Box 802, Culver City, CA 90232-0802.

Additional bibliographies can be found in many of the above publications, and by doing ERIC (INFORMS) searches through your AEA with descriptors such as global, international, multi-cultural, environment, etc. The organizations listed below have additional publications too numerous to list here.

Organizations and Resource Centers

Iowa Organizations

International Resource Center
Old Botany Building
Iowa State University
Ames, IA 50011
(515) 294-0371
Contact: Margaretjean Weltha

Iowa Peace Institute
P.O. Box 480
Grinnell, IA 50112
(515) 236-4880
Contact: Noa Davenport

Iowa United Nations Association
26 E. Market
Iowa City, IA 52240
(319) 337-7290
Contact: Dorothy Paul

Office of International Education and Service
120 International Center
University of Iowa
Iowa City, IA 52244
Contact: Kay Turney

The Stanley Foundation
420 East Third Street
Muscatine, IA 52761
(319) 264-1500
Contacts: Jill Goldsberry, Jan Drum

National Organizations

The American Forum (formerly, Global Perspectives in Education, Inc.)
45 John Street, #1200
New York, NY 10038
(212) 732-8606

Association for Supervision and Curriculum Development
225 North Washington Street
Alexandria, VA 22314
(703) 549-9100

Center for Public Education in International Affairs
University of Southern California
School of International Relations
VKC 328
Los Angeles, CA 90089-0043
(213) 743-4214

Center for Teaching International Relations (CTIR)
University of Denver
Graduate School of International Studies
Denver, CO 80208
(303) 871-2164

Countdown 2001
5636 Utah Ave., N.W.
Washington, D.C. 20015
(202) 537-1179

Global Awareness Program, College of Education
Florida International University
Tamiami Trail
Miami, FL 33199
(305) 554-2664

Las Palomas de Taos
P.O. Box 3400
Taos, NM 87571
(505) 758-9456

National Resource Center for International Studies
303 Thompson Hall
University of Washington
Seattle, WA 98195
(206) 543-4800

Social Studies Development Center
Indiana University
2805 East 10th Street
Bloomington, IN 47405
(812) 337-3838

Stanford Program on International and Cross-Cultural Education (SPICE)
Littlefield Center, Room 14
Stanford University
Stanford, CA 94305-5013
(415) 723-1114

World Citizen, Inc.
3721 48th Ave. So.
Minneapolis, MN55406
(612) 722-2714